For Debate

Myalgic encephalomyelitis, Princess Aurora, and the wandering womb

Caroline Richmond

Myalgic encephalomyelitis is the first and indeed the only disease legally recognised in Britain, thanks to a private member's bill passed in 1988. The term means aching muscles and an inflamed brain and spinal cord. Pretty serious stuff, and bound to frighten the relatives of patients who can pronounce it. To paraphrase Paré: "Catch the new disease while it still has the power to impress."

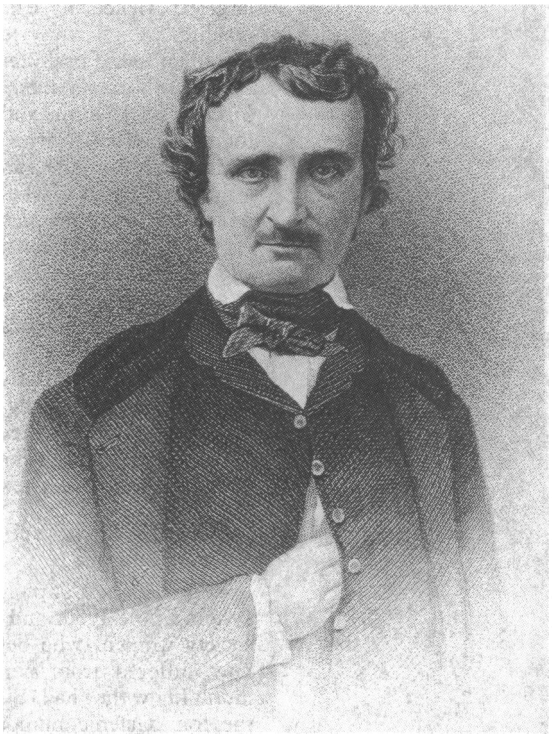
A British disease

Myalgic encephalomyelitis is a new name for an old disease with an impressive history of synonyms. It's a British disease, unknown in the New World; but North America is in the grip of chronic Epstein-Barr virus infection, and Australasia has repetitive stress injury, which unkind people say is myalgic compensationitis.

Myalgic encephalomyelitis and chronic Epstein-Barr virus will be endangered species of illness when antiviral drugs become a reality. These diseases have almost ousted hypoglycaemia, *Candida albicans*, total allergy syndrome, and allergy to the twentieth century, which will soon be out of style, replaced by twenty first century disease. The attraction of allergy to the hypochondriac is its personal uniqueness: if I say I've got an allergy you can't say I haven't, whatever your private opinion may be.

Total allergy syndrome's most recent predecessor was chlorosis, the "green sickness" of well to do young women at puberty. It probably included anaemia and anorexia, was usually cured by marriage and childbearing, and was occasionally found in men. Though chlorosis was recorded as early as 1781, it made a major come back early this century, replacing the more exciting neurasthenia—which is exhaustion of the brain and spinal cord—launched by the American neurologist George Miller Beard.[1] Beard described neurasthenia as the most common nervous disease in America, a disease of modern civilisation encompassing cerebrasthenia (brain exhaustion) and myelasthesia (spinal cord exhaustion). Clever physicians and interested patients could have a stab at the differential diagnosis.

Like myalgic encephalomyelitis neurasthenia was surprisingly common among doctors, and Beard suffered from it himself. He compared himself with Aristotle, Plato, Copernicus, and Darwin for discovering it. As Beard explained, it had not been previously described because it was rare in the public wards of charity hospitals; any doctor, however, who "should ever engage in private practice among the better classes of any of our larger cities . . . will meet these diseases every day and every hour, and his success will depend to a considerable extent on his skill in managing them."[1] How true in Harley Street today.



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Edgar Allan Poe, 1809-49, American poet, short story writer, and critic, who in 1848 was "desperately ill with brain fever"[2]

Beard wrote several books on neurasthenia, and they resembled modern popular books on allergy—that is, supposedly intended for doctors but angled at patients. He remarked that sufferers looked five or 10 years younger than other people of their age and lived longer. After detailing a comprehensive grab bag of symptoms—it even included sweaty palms, itchy feet, dyspepsia, and myoclonic twitches while dozing off—he emphasised the difficulty of finding a cure but listed the remedies. The dedicated hypochondriac, however, finding his or her symptoms listed, including some whose importance he or she was unaware of, and scenting a new career as patient, has never been satisfied with self treatment. He or she wants to see the "top man" on the subject—and who else than the author of the best selling book?

A Victorian disease

Neurasthenia superseded brain fever, a disease that swept the English speaking world but never made it

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into the medical textbooks. To the Victorian reader it meant delirium, insanity, dramatic behaviour, and sometimes actual fever.

Richard Caplan, a doctor in Iowa, has reported that in 1848 the *Saturday Evening Post* appealed for help for Edgar Allan Poe, "desperately ill with brain fever."[2] Poe's writings reflected his life: a series of bouts of dipsomania, laudanum abuse, paedonecrophiliac fantasies, delirium tremens, and fugues. The best account remains that by the psychoanalyst Marie Bonaparte, who became Princess George of Greece and was a pupil of Freud.[3]

Caplan notes also that Sir Arthur Conan Doyle, who graduated in medicine at Edinburgh in 1882, often allowed Dr Watson to say that people were suffering from brain fever. In *A Medical Document*, however, Conan Doyle had a physician say "Then there is the mysterious malady called brain fever, which always attacks the heroine after a crisis, but which is unknown under that name to the textbooks. People when they are overexcited in novels fall down in a fit. In a fairly large experience I have never known anyone to do so in real life."

Caplan found brain fever in *Domestic Medicine, or a Poor Man's Friend in the Hours of Affliction, Pain, and Sickness* by J Gunn, and published in 1847. He also found it in *Huckleberry Finn*. One day when Huck had to explain Mary Jane's absence he said she was visiting a fictitious patient, who had a new kind of mumps, mixed up with "measles, and whooping cough, and erysiplas [sic], and consumption, and yaller janders, and brain fever, and I don't know what at all." Later, in a different kind of emergency, Huck hid a hunk of corn bread, topped with a piece of butter the size of his fist, under his hat. In the warmth of the room it melted: ". . . and a streak of butter comes a-trickling down my forehead, and Aunt Sally she sees it, and turns white as a sheet, and says 'for the land's sake what *is* the matter with the child!—he's got the brain fever as shore as you're born, and they're oozing out!'"

Vapours and bile

Robert Whytt's pioneer books on the nervous system in the 1750s and 1760s were widely read, and society women, who before had suffered from bile, now suffered from nerves, which they previously didn't know they had. Bile gives us melancholy, one of the four Galenic humours; the name means black bile disease. It predated hypochondria, the disease located below the substernal gristle, and hysteria, the wandering womb. It is noted in the *Oxford English Dictionary* that from 1563 the hypochondrium was the seat of melancholy and the vapours. Only later did it mean the unfounded belief of having serious disease. Hysteria was originally a disease of spinsters, whose dry wombs wandered around their bodies in search of moisture.

During the eighteenth century bile competed with the vapours, described in the *Oxford English Dictionary* as exhalations developed within the organs, especially the stomach, that injure health. The *Oxford English Dictionary* contains a quotation from *The Castle of Health* (1539) by Sir Thomas Elyot: "Of humours some are more gross and colde, some are subtyl and hot, and are called vapours." Beveridge warned in his 1729 sermons of "those malign vapours which by reason of overmuch eating are exhaled from the stomach into the head."

Then as now ladies suffering from the vapours retired to their boudoirs. Taken from the French verb *bouder*, to sulk, a boudoir is a lady's sulking room. The bedroom as a place of social retreat has been part of much female (and some male) fantasy and is exemplified in fairy tales. A typically environmentally sensitive princess could not sleep when a pea was placed under 15 mattresses. In *Sleeping Beauty* Princess Aurora reached her 16th birthday, pricked her finger, bled symbolically, and fell into a deep sleep in her boudoir until Prince Florian (alias Dr Kildare) arrived, fell in love with her, and kissed her. This provided an instant cure and he proposed marriage. She became a queen, lived a life of leisure, and consequently was happy ever after.

Plus ça change . . .

The illness behaviour of patients and the diagnostic behaviour of doctors are susceptible to fashion, and they are a part of it. Plus ca change, c'est la meme chose. Neurasthenia, brain fever, melancholy, the vapours, hysteria, chlorosis, hypochondria—the names emphasised that the diseases were organic. Now they have lost their organic associations and imply states of personality or mind. Will the same thing happen to hypoglycaemia, *Candida albicans*, total allergy syndrome, chronic Epstein-Barr virus infection, repetitive stress injury, and myalgic encephalomyelitis.

I thank Drs Mark Micale and Nick Beard for helpful suggestions.

1 Beard M. *A practical treatise on nervous exhaustion (neurasthenia)*. New York: William Wood, 1880.
2 Caplan R. Sherlock Holmes and brain fever. *Perspect Biol Med* 1987;**30**:433-9.
3 Bonaparte M. *Edgar Allan Poe: a psychoanalytic study*. London: Imago, 1949.

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ANY QUESTIONS

What, if any, are the long term effects of regularly ingesting small amounts of detergent—for example, the traces left on crockery and cutlery after rinsing?

A few years ago there was concern about the safety of long term ingestion of washing up liquid when a study showed subtotal villous atrophy in rats after they were fed "low dose" Fairy Liquid (100 mg/kg) for between 18 and 68 weeks.[1] Apart from causing a lot of media attention, however, this paper was criticised on methodological grounds and also because the doses used were 600-40 000 times greater than estimated human consumption.[2] Other published work does not support the results of the paper.

The constituents that have caused concern in detergents are the anionic surfactants—for example, alkyl benzene sulphonate. The amount of surfactant on dishes after washing depends on the method used—not rinsing or drying dishes after washing leaves the most residue (thought to be the habit of 5-10% of the British population). Surfactant is also ingested from other sources—for example, fruit, vegetables, and toothpaste. Calculations of consumption of surfactant (from all sources) vary from 0·2 mg/kg to 1 mg/kg. Most estimates are around 0·2 mg/kg, equivalent to 14 mg/day for a 70 kg man. A survey in Tokyo concluded that 95% of the surfactants ingested came from sources other than dishes: in particular from fruit and vegetables.[3]

It seems that there are no long term effects from ingesting small amounts of detergent and that to avoid exposure it would be necessary to wash fruit and vegetables thoroughly as well as rinsing and drying dishes.—FRANCESCA LOWE-PONSFORD, *registrar, Poisons Unit, Guy's Hospital, London*

1 Mercurius-Taylor LA, Jayaraj AP, Clark CG. Is chronic detergent ingestion harmful to the gut? *Br J Ind Med* 1984;**40**:279-81.
2 Anonymous. Do detergent residues damage the gut? [Editorial]. *Lancet* 1984;ii:384-5.
3 Scailteur V, Maurer JK, Walker AP, Calvin G. *Food Chem Toxicol* 1986;**24**:175-81.